

## **IN THE CLAIMS**

This listing of the claim will replace all prior versions and listings of claim in the present application.

### **List of Claims**

1. (currently amended) An inventory control system, comprising:
  - demand predicting means for calculating a predicted value of a demand based on past actual demand information;
  - actual value retrieval means for retrieving an actual value of demand which is compared with the predicted demand value;
  - predicted remainder calculating means for calculating a predicted reminder which is a difference between the predicted demand value and the actual value;
  - parameter calculating means for calculating a parameter such as standard deviation by employing the predicted remainder;
  - safety stock calculating means for calculating safety stock based upon said parameter;
  - input means for accepting setting or updating of a setting value such as a planning cycle and at least one of a procurement lead time and a plan lead time, and
  - data storage means for storing therein in time sequence respective setting values and the actual demand information at every unit time period from a past time to a present time,
  - wherein upon receipt of updating of a setting value, via the input means, such as said planning cycle and at least one of said procurement lead time and said plan lead time, the demand predicting means calculates

planned demand value of a second past time period based on an actual demand value of a first past time period stored in the data storage means,

wherein the actual value retrieval means retrieves and totalizes actual demand values corresponding to the second past time period stored in the data storage means,

wherein the predicted remainder calculating means calculates a predicted remainder which is a difference between the planned demand value of the second past time period and the actual demand value of the second past time period;

wherein a process is performed in which the demand predicting means calculates a planned demand value of a third past time period stored in the data storage means which is different from the first past time period, the actual value retrieval means retrieves and totalizes actual demand value corresponding to the fourth past time period, and the predicted remainder calculating means calculates a predicted reminder from the planned demand value of the fourth past time period and the actual demand value of the fourth past time period to obtain a new sample of the predicted reminder,

wherein the process is repeatedly performed for different past time periods until a desired number of the processes has been performed,

wherein the parameter calculating means calculates a standard deviation based on a plurality of the samples of the predicted reminders obtained by the repeated calculation, and

wherein the safety stock calculating means newly calculates a safety stock based upon the parameter including such as standard deviation and the

updated setting value, each time the setting value is updated, to thereby  
update a current safety stock.

Claims 2-19 (canceled).

20. (previously presented) An inventory control system according to claim 1, wherein each of the stored second and fourth past time periods is a time period substantially same as a planned range which is a sum of the planning cycle, the procurement lead time and the plan lead time.